

**CRE Faculty Name:** Meng Zhou

**Project Title:** "Homogeneous and Heterogeneous Copper Catalysts for Urea Production from CO<sub>2</sub>"

**CRE Course:** CHM 3463 Advanced Synthesis Laboratory

**Student Researcher Name and Major:** Xinrui Zhou (Double Major in Business Administration and Chemical Biology)

**CRE Project Description:**

Our research has identified micro-size copper oxide particles as an effective catalyst for producing urea from CO<sub>2</sub> greenhouse gas. We are currently developing new catalysts and reaction conditions to increase the efficiency of this process. The new catalysts to be tested include nano-size copper oxide particles and copper complexes, which should be more effective than micro-size copper oxide particles.